
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, NW
Suite 700
Washington, DC 20004

Professional Development Program

Contact Sue Dickerson at **1-800-788-4016** for more information
Fax: 202-208-6518

Internet Site: www.dnfsb.gov
(These are permanent full-time positions)

What we do: The Board is an independent agency in the Executive branch of the government, charged with providing safety oversight of the Department of Energy's (DOE's) defense nuclear facilities. Established in September 1988, the Board provides the public with added assurance that DOE's defense nuclear facilities, required to maintain the nation's nuclear weapons stockpile, are being safely designed, constructed, operated, and decommissioned. In addition, the Board shares responsibility with other federal and state agencies for major environmental restoration activities. The specific duties for entry-level engineers are highly technical and diverse. Their duties and activities include analysis and design, interaction with accomplished technical experts across the defense nuclear complex, mentoring from the Board's senior technical staff, and interaction with Board members and world class experts. As part of their assignments, entry-level engineers participate in technical reviews at defense nuclear sites and attend technical meetings and conferences in their areas of concentration and expertise.

Location: Main Office in Washington, DC

What We Offer: 3-year Professional Development Program with follow-on 2-year service commitment and long term growth.

- **Year One** - Orients the individual to the Board's mission, organization, policies, and operation, including an overview of and interaction with the spectrum of technical projects. Examples of first year assignments include: (1) reviewing the design and safety of the In-Tank Precipitation facility at the Savannah River site; (2) analyzing explosive hazards in process tanks at the Rocky Flats Plant and the Savannah River Site by modeling the generation and build-up of flammable gases and vapor mixing; (3) calculating thermal gradients in nuclear components and modeling corrosion rates to forecast the remaining lives of vessels that contain radioactive materials; (4) analyzing impacts of waste acceptance criteria for plutonium residues; and (5) researching treatment and disposal options of spent nuclear fuel.
- **Year Two** - The individual is sent to graduate school with fully-paid tuition and full salary during this second year. Selection of graduate school and course of study are mutually agreed upon by the Board and individual. In the past, entry-level engineers have completed studies at MIT, Stanford, Illinois, Cornell, and Berkeley.
- **Year Three** - Incumbent spends approximately one year on a challenging technical assignment. Possibilities include working at one of the DOE sites with a Board Site Representative, with a private company, national laboratory or other government agency. Examples of host companies include: Westinghouse, Los Alamos National Lab, Duke Power, US Army Corps of Engineers, Millstone Nuclear Power Station, and Oak Ridge.

Essential Skills & Qualifications: A 3.5 GPA or higher is preferred. Excellent communication skills, the ability to work as a technical contributor on multi-disciplinary teams, and be a self-starter.

Technical Disciplines: Mechanical Engineering, Nuclear Engineering, Chemical Engineering, Earthquake Engineering (Civil Engineering), Electrical Engineering and Engineering Physics.